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HEWLETT PACKARD COMPANY
P O BOX 272400, 3404 E. HARMONY ROAD
INTELLECTUAL PROPERTY ADMINISTRATION
FORT COLLINS, CO 80527-2400

EXAMINER


GARCIA JR, RENE

ART UNIT	PAPER NUMBER
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2853

DATE MAILED: 03/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/760,031	Applicant(s) COURIAN ET AL.	
	Examiner Rene Garcia, Jr.	Art Unit 2853	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-83 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-82 is/are rejected.
- 7) ☒ Claim(s) 60, 61, 67, 75 and 83 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>9 November 2005</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Oath/Declaration

1. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because: Keywords in "As a below named inventor, I hereby declare that:" have crucial letters missing (both first pages of submitted Oath/Declaration pages); and signature for James Kelley eligible

Specification

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

3. The abstract of the disclosure is objected to because legal phraseology (comprises) is used, correction is required. See MPEP § 608.01(b).

Claim Objections

4. Claims 60, 61, 67, 75 and 85 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. With regards to claims 60 and 61, claims do

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not contain any new limitations not presented in claim 50. With regards to claim 67, claim does not contain any new limitations not presented in claim 62. With regards to claim 75, claim does not contain any new limitations not presented in claims 70. With regards to claim 83, claim does not contain any new limitations not presented in claim 78.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 3, 4, 5, 9 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Jacobs (US 6,271,926).

Jacobs discloses the following claimed limitations:

*regarding claim 1, receiving user input associated with a printmode selection (fig. 7 & 8; col. 2, lines 27-37; col. 8, lines 21-41)

*mapping said printmode selection to one or more parameter values associated with the printmode (col. 8, lines 21-41)

*providing the user with feedback associated with consequences of their printmode selection (fig. 7; col. 7, lines 50-61; col. 7, line 66- col. 8, line 13 – visual representation of selections lets user know what output parameters have been selected)

*regarding claim 3, act of receiving is performed using a soft user interface (col. 2, lines 27-37; col. 3, lines 12-13; fig. 7)

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*regarding claim 4, act of receiving is performed by at least one printer (image forming device/4/; printer/20/ part of image forming device; fig. 1 & 2; col. 3, lines 26-31; col. 4, lines 1-3)

*regarding claim 5, act of receiving is performed by at least one host computer in operable communication with at least one printer (col. 7, lines 61-67; col. 8, lines 7-13)

*regarding claim 9, act of providing is performed by providing the user with feedback on print quality associated with the printmode selection (fig. 7; image quality/print quality/ tab)

*regarding claim 10, act of providing is performed by providing the user with feedback on one or more parameter values associated with the printmode selection (fig. 7 – brightness, contrast, resolution)

7. Claims 14-18, 20, 22, 25-31, 33, 35, 37, 38, 40-43, 47-50, 52-54, 57, 70 and 77 are rejected under 35 U.S.C. 102(b) as being anticipated by Moro et al. (US 6,327,051).

Moro et al. discloses the following claimed limitations:

*regarding claims 14, 27, 38 and 50, receiving user input that pertains to selection of a printmode that is not a pre-defined printmode for a particular printer (col. 2, lines 58-62)

*providing the user with feedback that pertains to a selected printmode (col. 2, line 66- col. 3, line 6)

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*regarding claims 15, 28 and 41, act of receiving comprises receiving input pertaining to print quality (fig. 22 – col. 6, lines 32-34)

*regarding claims 16, 29 and 42, act of receiving comprises receiving input pertaining to throughput (fig. 22 – printing quality affects throughput i.e. more quality longer time shorter throughput)

*regarding claims 17, 30 and 43, act of receiving comprises receiving input pertaining to print quality and throughput (fig. 22)

*regarding claims 18 and 31, responsive to receiving said user input, adjusting one or more printmode parameters (col. 6, lines 45-50)

*regarding claims 20 and 33, at least one parameter comprises a parameter associated with print masks (fig. 22 – Dither Setting)

*regarding claims 22 and 35, at least one parameter comprises a parameter associated with drops per pixel/**density**/ (fig. 26; col. 19, lines 23-32)

*regarding claim 25, act of providing comprises providing the user with feedback that pertains to an expected change in print quality responsive to said user input (fig. 22; col. 18, lines 25-31)

*regarding claims 26 and 37, saving a printmode selection as a user-defined print mode (fig. 2; col. 6, lines 52-63)

*regarding claims 40 and 52, printmode selection component comprises at least one soft control (col. 6, lines 28-38)

*further regarding claims 27 and 40, one or more computer-readable media having computer-readable instructions thereon which, when executed by one or more processors, cause the one or more processors to execute a method (fig. 1, 10 & 17; col. 8, line 63- col. 9, line 17)

*further regarding claims 38 and 50, user interface component comprising:

*printmode selection component (col. 6, lines 28-30; fig. 1)

*regarding claim 47, embodied on at least one host computer that is connected to an associated printer (fig. 10; col. 8, lines 56-62)

*regarding claim 48, embodied on at least one printer (col. 9, lines 62-65)

*regarding claims 49 and 57, printmode selection component is configured to enable a user to make a selection along a continuum of printing speeds (fig. 22; Printing Quality – High Speed to High Quality; affects the printing speed)

*regarding claim 53, means for providing a user with feedback comprises a window (fig. 22; col. 17, lines 57-60)

*regarding claim 54, means for providing a user with feedback comprises a soft window (fig. 22; col. 17, lines 57-60)

*regarding claim 70, user interface component comprising:

*throughput control configured to enable a user to make a selection between print speed and quality

*feedback window configured to provide a user with feedback associated with a throughput selection made by the user (fig. 22; col. 6, lines 28-38)

*regarding claim 77, color/mono control configured to enable a user to select printheads that are used for printing (fig. 2 & 21; col. 18, lines 18-19; col. 24, lines 7-11)

8. Claims 62 and 63 are rejected under 35 U.S.C. 102(b) as being anticipated by Narendranath et al. (US 5,751,433).

Narendranath et al. discloses the following claimed limitations:

*regarding claim 62, user interface component comprising:

*ink density control configured to allow a user to select an amount of ink that is to be placed on a print media (fig. 3 & 4; col. 8, lines 6-55) for the purpose of lowering toner usage and print time

*feedback window configured to provide a user with feedback associated an ink density selection made by the user (fig. 3 & 4 – visual window showing changes made by user)

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*regarding claim 63, feedback comprises a printmode name (fig. 4; “Variable Color Draft Mode”)

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jacobs (US 6,271,926) in view of Takemura et al. (US 5,988,784).

Jacobs disclose all the claimed limitations except for the following:

*regarding claim 2, act of receiving is performed using a hard user interface

Takemura et al. discloses the following:

*regarding claim 2, act of receiving is performed using a hard user interface/switches, 801, 802 & 803/ (fig. 14; col. 12, lines 49-51) for the purpose of controlling parameters for adjusting printing quality

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to utilize act of receiving is performed using a hard user interface as taught by Takemura et al. into Jacobs for the purpose of controlling parameters for adjusting printing quality

11. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jacobs (US 6,271,926) in view of Kato et al. (US 6,390,583).

Jacobs discloses all the claimed limitations except for the following:

*regarding claim 6, act of receiving comprises receiving user input associated with ink density

Kato et al. discloses the following:

*regarding claim 6, act of receiving comprises receiving user input associated with ink density (col. 7, lines 26-44) for the purpose of printing high quality images without lowering throughput

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to utilize act of receiving comprises receiving user input associated with ink density by Kato et al. into Jacobs for the purpose of printing high quality images without lowering throughput

12. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jacobs (US 6,271,926) in view of Winter et al. (US 6,040,927).

Jacobs disclose all the claimed limitations except for the following:

*regarding claim 7, act of receiving comprises receiving user input associated with throughput

*regarding claim 8, at least one of the parameter values is associated with error hiding

Winter et al. discloses the following:

*regarding claim 7, act of receiving comprises receiving user input associated with throughput/**print quality**/ (fig. 4; col. 7, lines 40-58 – quality affects throughput i.e. more quality longer time shorter throughput) for the purpose of sacrificing speed for quality or quality for speed

*regarding claim 8, at least one of the parameter values is associated with error hiding/**error diffusion**/ (fig. 6; col. 2, lines 36-46; col. 3, lines 38-49) for the purpose of producing high quality images

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to utilize act of receiving comprises receiving user input associated with throughput; at least one of the parameter values is associated with error hiding as taught by Winter et al. into Jacobs for the purpose of sacrificing speed for quality or quality for speed and producing high quality images

13. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jacobs (US 6,271,926) in view of Yamamoto et al. (US 2002/0054333).

Jacobs disclose all the claimed limitations except for the following:

*regarding claim 11, at least one parameter value comprises a value associated with estimated printing time

Yamamoto et al. discloses the following:

*regarding claim 11, at least one parameter value comprises a value associated with estimated printing time (paragraph 0056 & 0056; fig. 5, 6 & 9) for the purpose of allowing the user to cancel the printing process which needs the estimated print time i.e. if deemed to long

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to utilize at least one parameter value comprises a value associated with estimated printing time as taught by Yamamoto et al. into Jacobs for the purpose of allowing the user to cancel the printing process which needs the estimated print time i.e. if deemed to long

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14. Claims 12 & 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jacobs (US 6,271,926) in view of Narendranath et al. (US 5,751,433).

Jacobs disclose all the claimed limitations except for the following:

*regarding claim 12, at least one parameter value comprises a value associated with ink or toner density

*regarding claim 13, effecting printing using the selected printmode

Narendranath et al. discloses the following:

*regarding claim 12, at least one parameter value comprises a value associated with ink or toner density (fig. 3 & 4; col. 8, lines 6-55) for the purpose of lowering toner usage and print time

*regarding claim 13, effecting printing using the selected printmode (fig. 3 & 4; col. 8, lines 6-55) for the purpose of lowering toner usage and print time

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to utilize at least one parameter value comprises a value associated with ink or toner density; and effecting printing using the selected printmode as taught by Narendranath et al. into Jacobs for the purpose of lowering toner usage and print time

15. Claims 19, 21, 24, 32, 34, 36, 39, 51 and 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moro et al. (US 6,327,051) in view of Takemura et al. (US 5,988,784).

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Moro et al. disclose all the claimed limitations except for the following:

*regarding claims 19 and 32, at least one parameter comprises a scan speed parameter

*regarding claims 21 and 34, at least one parameter comprises a parameter associated with nozzle firing frequency

*further regarding claims 24 and 36, parameters comprise parameters selected from a group of parameters associated with scan speed, nozzle firing frequency

*regarding claims 39 and 51, printmode selection component comprises at least one hard control

*regarding claim 55, means for providing a user with feedback comprises a hard window

Takemura et al. discloses the following:

*regarding claims 19, 24, 32 and 36, at least one parameter comprises a scan speed parameter/**carriage speed, 803/** (fig. 14 & 15; col. 9, lines 8-20; col. 12, lines 36-55) for the purpose of performing a high quality recording operation

*regarding claims 21, 24, 34 and 36, at least one parameter comprises a parameter associated with nozzle firing frequency/**ink discharge speed, 802/** (fig. 14 & 15; col. 9, lines 8-20; col. 12, lines 36-55) for the purpose of performing a high quality recording operation

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*regarding claims 39 and 51, printmode selection component comprises at least one hard control /switches, 801, 802 & 803/ (fig. 14; col. 12, lines 49-51) for the purpose of controlling parameters for adjusting printing quality

*regarding claim 55, means for providing a user with feedback comprises a hard window (fig 15; col. 12, lines 56-58) for the purpose of displaying selections to the user

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to utilize at least one parameter comprises a scan speed parameter; at least one parameter comprises a parameter associated with nozzle firing frequency; parameters comprise parameters selected from a group of parameters associated with scan speed, nozzle firing frequency; printmode selection component comprises at least one hard control; and means for providing a user with feedback comprises a hard window as taught by Takemura et al. into Moro et al. for the purpose of performing a high quality recording operation; and controlling parameters for adjusting printing quality

16. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Moro et al. (US 6,327,051) in view of Tsujimoto (US 2004/0113963).

Moro et al. disclose all the claimed limitations except for the following:

*regarding claim 23, at least one parameter comprises a parameter associated with scan direction

Tsujimoto discloses the following:

*regarding claim 23, at least one parameter comprises a parameter associated with scan direction (paragraph 0085 – printing direction) for the purpose of automatically and precisely make setting associated with the particular printing medium

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to utilize at least one parameter comprises a parameter associated with scan direction as taught by Tsujimoto into Moro et al. for the purpose of automatically and precisely make setting associated with the particular printing medium

17. Claims 44 and 74 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moro et al. (US 6,327,051) in view of Yamamoto et al. (US 2002/0054333).

Moro et al. disclose all the claimed limitations except for the following:

*regarding claims 44 and 74, user feedback component is configured to provide feedback that pertains to estimated printing time

Yamamoto et al. discloses the following:

*regarding claims 44 and 74, user feedback component is configured to provide feedback that pertains to estimated printing time (paragraph 0056 & 0056; fig. 5, 6 & 9) for the purpose of allowing the user to cancel the printing process which needs the estimated print time i.e. if deemed to long

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to utilize user feedback component is configured to provide feedback that pertains to estimated printing time as taught by Yamamoto et al. into Moro et al. for the purpose

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of allowing the user to cancel the printing process which needs the estimated print time i.e. if deemed to long

18. Claims 45 and 56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moro et al. (US 6,327,051) in view of Jacobs (US 6,271,926).

Moro et al. disclose all the claimed limitations except for the following:

* regarding claims 45 and 56, user feedback component is configured to provide feedback that pertains to print quality (fig. 7; image quality/print quality/ tab)

Jacobs discloses the following:

* regarding claims 45 and 56, user feedback component is configured to provide feedback that pertains to print quality (fig. 7; image quality/print quality/ tab) for the purpose of selecting an appropriate print mode for a specific medium or print conditions

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to utilize user feedback component is configured to provide feedback that pertains to print quality as taught by Jacobs into Moro et al. for the purpose of selecting an appropriate print mode for a specific medium or print conditions

19. Claims 46 and 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moro et al. (US 6,327,051) in view of Olson (US 6,381,036).

Moro et al. disclose all the claimed limitations except for the following:

*regarding claims 46 and 58, user feedback component is configured to provide feedback that pertains to printhead life

Olson discloses the following:

*regarding claims 46 and 58, user feedback component is configured to provide feedback that pertains to printhead life (col. 4, lines 53-56; col. 5, line 66- col. 6, line 3 – the levels/ amount/ of used ink for each print job decreases the remaining ink supply and decreases print head life) for the purposes of informing user how much ink/toner will be used based on selection choices

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to utilize user feedback component is configured to provide feedback that pertains to printhead life as taught by Olson into Moro et al. for the purposes of informing user how much ink/toner will be used based on selection choices

20. Claim 66 is rejected under 35 U.S.C. 103(a) as being unpatentable over Narendranath et al. (US 5,751,433) in view of Yamamoto et al. (US 2002/0054333).

Narendranath et al. disclose all the claimed limitations except for the following:

*regarding claim 66, user feedback component is configured to provide feedback that pertains to estimated printing time

Yamamoto et al. discloses the following:

*regarding claim 66, user feedback component is configured to provide feedback that pertains to estimated printing time (paragraph 0056 & 0056; fig. 5, 6 & 9) for the purpose of allowing the user to cancel the printing process which needs the estimated print time i.e. if deemed to long

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to utilize user feedback component is configured to provide feedback that

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pertains to estimated printing time as taught by Yamamoto et al. into Narendranath et al. for the purpose of allowing the user to cancel the printing process which needs the estimated print time i.e. if deemed to long

21. Claim 69 is rejected under 35 U.S.C. 103(a) as being unpatentable over Narendranath et al. (US 5,751,433) in view of Moro et al. (US 6,327,051).

Narendranath et al. disclose all the claimed limitations except for the following:

*regarding claim 69, color/mono control configured to enable a user to select printheads that are used for printing

Moro et al. discloses the following:

*regarding claim 69, color/mono control configured to enable a user to select printheads that are used for printing (fig. 2 & 21; col. 18, lines 18-19; col. 24, lines 7-11) for the purpose of creating different types of images as defined by user

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to utilize color/mono control configured to enable a user to select printheads that are used for printing as taught by Moro et al. into Narendranath et al. for the purpose of creating different types of images as defined by user

22. Claims 59 and 72 is rejected under 35 U.S.C. 103(a) as being unpatentable over Moro et al. (US 6,327,051) in view of Castelltort et al. (WO 02/019261 A1).

Moro et al. disclose all the claimed limitations except for the following:

*regarding claims 59 and 72, means for providing a user with feedback comprises a window, and said feedback comprises information that pertains to a number of printing passes

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Castelltort et al. discloses the following:

*regarding claims 59 and 72, means for providing a user with feedback comprises a window, and said feedback comprises information that pertains to a number of printing passes (page 2, lines 16-20; page 4, lines 22-24; page 24, line 31 – page 25, line 6; fig. 6) for the purpose of achieving maximum output quality on a particular medium

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to utilize means for providing a user with feedback comprises a window, and said feedback comprises information that pertains to a number of printing passes as taught by Castelltort et al. into Moro et al. for the purpose of achieving maximum output quality on a particular medium

23. Claims 64, 65, 68, 73 and 76 are rejected under 35 U.S.C. 103(a) as being unpatentable over Narendranath et al. (US 5,751,433) in view of Castelltort et al. (WO 02/019261 A1).

Narendranath et al. disclose all the claimed limitations except for the following:

*regarding claim 64, feedback comprises a number of passes to be made

*regarding claims 65 and 73, feedback comprises a printing direction

*regarding claims 68 and 76, alternate printmode control configured to enable a user to select between multiple print masks for a given printmode

Castelltort et al. discloses the following:

*regarding claim 64, feedback comprises a number of passes to be made (page 2, lines 16-20; page 4, lines 22-24; page 24, line 31 – page 25, line 6; fig. 6) for the purpose of achieving maximum output quality on a particular medium

*regarding claims 65 and 73, feedback comprises a printing direction (page 2, lines 16-20; page 4, lines 22-24; page 24, line 31 – page 25, line 6; fig. 6) for the purpose of achieving maximum output quality on a particular medium

*regarding claims 68 and 76, alternate printmode control configured to enable a user to select between multiple print masks/**color maps**/ for a given printmode (page 2, lines 16-20; page 4, lines 22-24; page 25, lines 26-32;fig. 6) for the purpose of achieving maximum output quality on a particular medium

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to utilize feedback comprises a number of passes to be made; feedback comprises a printing direction; and alternate printmode control configured to enable a user to select between multiple print masks for a given printmode as taught by Castelltort et al. into Narendranath et al. for the purpose of achieving maximum output quality on a particular medium

24. Claim 71 is rejected under 35 U.S.C. 103(a) as being unpatentable over Moro et al. (US 6,327,051) in view of Narendranath et al. (US 5,751,433).

Moro et al. disclose all the claimed limitations except for the following:

*regarding claim 71, feedback comprises a printmode name

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*regarding claim 79, feedback comprises a printmode name

*regarding claim 80, feedback comprises a number of passes to be made

*regarding claim 81, feedback comprises a printing direction

*regarding claim 82, feedback comprises estimated printing time

Narendranath et al. discloses the following claimed limitations:

*regarding claim 78, user interface component comprising:

*ink density control configured to allow a user to select an amount of ink that is to be placed on a print media (fig. 3 & 4; col. 8, lines 6-55) for the purpose of lowering toner usage and print time

*regarding claim 79, feedback comprises a printmode name (fig. 4; “Variable Color Draft Mode”) for the purpose of easily identifying print modes

Castelltort et al. discloses the following:

*regarding claim 78, alternate printmode control configured to enable a user to select between multiple print masks/**color maps**/ for a given printmode (page 2, lines 16-20; page 4, lines 22-24; page 25, lines 26-32;fig. 6) for the purpose of achieving maximum output quality on a particular medium

Narendranath et al. discloses the following:

*regarding claim 71, feedback comprises a printmode name (fig. 4; “Variable Color Draft Mode”) for the purpose of easily identifying print modes

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to utilize feedback comprises a printmode name as taught by Narendranath et al. into Moro et al. for the purpose of easily identifying print modes

25. Claims 78-82 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moro et al. (US 6,327,051) in view of Narendranath et al. (US 5,751,433), Castelltort et al. (WO 02/019261 A1), and Yamamoto et al. (US 2002/0054333).

Moro et al. disclose the following claimed limitations:

*regarding claim 78, user interface component comprising:

*throughput control configured to enable the user to make a selection between print speed and quality

*feedback window configured to provide a user with feedback associated with selections made by the user (fig. 22; col. 6, lines 28-38)

*color/mono control configured to enable the user to select printheads that are used for printing (fig. 2 & 21; col. 18, lines 18-19; col. 24, lines 7-11)

Moro et al. does not disclose the following claimed limitations:

*regarding claim 78, ink density control configured to allow a user to select an amount of ink that is to be placed on a print media

*alternate printmode control configured to enable the user to select between multiple print masks for a given printmode

*regarding claim 80, feedback comprises information that pertains to a number of printing passes to be made (page 2, lines 16-20; page 4, lines 22-24; page 24, line 31 – page 25, line 6; fig. 6) for the purpose of achieving maximum output quality on a particular medium

*regarding claim 81, feedback comprises a printing direction (page 2, lines 16-20; page 4, lines 22-24; page 24, line 31 – page 25, line 6; fig. 6) for the purpose of achieving maximum output quality on a particular medium

Yamamoto et al. discloses the following:

*regarding claim 82, feedback comprises estimated printing time (paragraph 0056 & 0056; fig. 5, 6 & 9) for the purpose of allowing the user to cancel the printing process which needs the estimated print time i.e. if deemed to long

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to utilize ink density control configured to allow a user to select an amount of ink that is to be placed on a print media, alternate printmode control configured to enable the user to select between multiple print masks for a given printmode; feedback comprises a printmode name; feedback comprises a number of passes to be made; feedback comprises a printing direction; and feedback comprises estimated printing time as taught by Narendranath et al., Castelltort et al. (WO 02/019261 A1), and Yamamoto et al. into Moro et al. for the purposes of lowering toner usage and print time; easily identifying print modes; achieving maximum output quality on a particular medium; and allowing the user to cancel the printing process which needs the estimated print time i.e. if deemed to long

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Conclusion


26. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Mantell (US 6,189,993) includes a user interface for selecting pre-determined print modes, print mask, print quality other selectable features. Webb et al. (US 5,727,135) includes a host based user interface for controlling various features of a printing apparatus. Minagawa (US 6,993,724) includes user selectable print modes to allow user to achieve a specific printing by controlling various components of the printing of an image through a user interface.

Communications with the USPTO

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rene Garcia, Jr. whose telephone number is (571) 272-5980. The examiner can normally be reached on M-F 8:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen D. Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Rene Garcia Jr
28 February 2006

 3/10/06
K. HEGGINS
PRIMARY EXAMINER